

## **AMENDMENTS TO SPECIFICATION:**

Please amend the paragraph beginning on page 28, line 27 of the specification as follows:

A respective histogram of each mean profile is then obtained and quantised to just five intervals or bins 1 to 5 as follows, (1)  $0.1 \leq \text{profile} < 0.2$ , (2)  $0.2 \leq \text{profile} < 0.4$ , (3)  $0.4 \leq \text{profile} < 0.6$ , (4)  $0.6 \leq \text{profile} < 0.8$ , and (5)  $0.8 \leq \text{profile} \leq 1.0$ . The bins have centres at 0.1, 0.3, 0.5, 0.7 and 0.9 respectively. Each bin contains the number of pixels in the mean profile having its respective intensity value: ~~because this number is averaged over the nine profiles it need not be an integer~~. Bin 1 corresponds to a darkest group of image intensity values, i.e. low greyscale values of the kind one would associate with images of mitotic figures; mitotic figures are normally dark using conventional staining techniques so relatively darker degrees of grey level are of more interest bins 2 to 4 correspond to progressively brighter values and bin 5 to the brightest of the five values. These are relative though because the profiles all come from relatively dark image regions. An approximate mean profile is represented by five values ~~each of which is an intensity value in a respective bin averaged over nine measured profiles~~. Each set of five values characterises a blob now treated as indicating an actual cell. The minimum value of each mean profile is recorded as the variable 'minprofile', ~~this being the contents (number of pixels averaged over nine profiles) of the bin having the smallest contents of all five bins~~.